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JPRS: 5183

CSO : R-75-N/J

SELECTED TRANSLATIONS OF  
ABSTRACTS IN REFERATIVNYY ZHURNAL - BIOLOGIYA, No. 6, 1959

This report consists of complete translations of the Russian-language abstracts of articles, which were originally published in the Sino-Soviet bloc and in Yugoslavia.

The Soviet subject classification system used in the original Russian language abstracts has been followed in this publication.

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Country : USSR  
 Category : Soil Science. General. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24568  
 Author : Yastrebov, M. T.  
 Inst : Academy of Sciences USSR.  
 Title : Natural Radioactivity of the Zonal Soils in  
 the European Part of USSR.  
 Orig Pub : Dokl. AN SSSR, 1958, 119, No 3, 586-589  
 Abstract : Determination results of the over-all natural  
 radioactivity of the zone soils (NRZS), loca-  
 ted along the meridian from Moscow to the  
 Krimean southern shores are reported (June-  
 July 1955). According to the absolute sizes  
 of the over-all NRZS, the investigated soils  
 are arranged in the following order: peaty-  
 podzol, heavy chernozem, light chernozem,  
 brown forest on scaly schists. In the appea-  
 Card : 1/2

Country : USSR  
 Category : Soil Science. General. J  
 Abs Jour : RZhBiol., No 6, 1969, 24569  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : rance of the over-all NRZS, water and to some  
 extent cosmic factors have great significance.  
 -- P. V. Shramko

Card : 2/2

Country : USSR  
 Category : Soil Science. General. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24569  
 Author : Tur, P. Z.  
 Inst : L'gov Experimentally Selective Station.  
 Title : The Effect of Perennial Grasses on Soil Fertility Changes.  
 Orig. Pub. : Byul. nauchno-tekhn. inform. L'govsk. opytno-selekts. st., 1958, vyp. 1, 39-43  
 Abstract : In Kurskaya Oblast the effect of the grass mixture - clover plus alfalfa plus fescue - on the fertility of the chernozem soil has been studied from the year 1948. The grass harvest in the first year of its use was 40-45 and in the second year 50-55 c/ha. More than two-thirds of the entire quantity of roots is found in the upper 10 cm layer of the soil. The grasses

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Country : USSR  
 Category : Soil Science. General. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24569  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : improve the physical properties of the soil. Content of the biologically active organic substance in the soil is visibly increased.  
 -- A. M. Smirnov

Card : 2/2

Country : CZECHOSLOVAKIA  
 Category : Soil Science. General. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24572  
 Author : Tjaglo, G.  
 Inst : Czechoslovakian Academy of Agricultural Science.  
 Title : A New Method for the Obtaining of Soil Monoliths.  
 Orig Pub : Sbor Ceskosl. akad. zemed. ved. Rada-Rostl. vyroba, 1956, 29, No 3, 203-212  
 Abstract : A device is described, by means of which a thin layer of soil is cut off under laboratory conditions from a soil monolith (measuring 25 x 25 x 105 cm). In a special frame the soil specimen is treated at average humidity with colorless nitrocellulose lacquer. The latter solidifies the soil, preserving the natural color of the soil horizons. The

Card : 1/2

Country : CZECHOSLOVAKIA  
 Category : Soil Science. General. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24572  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : soil monolith, obtained in this manner, is kept under glass for a long time.

Card : 2/2

Country : USSR  
 Category : Soil Science. General. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24573  
 Author : Uspanov, U. U.  
 Inst : Institute of Soil Science AS KazSSR.  
 Title : Works of the Institute of Soil Science AS Kaz-  
 SSR in the Regions of Virgin and Waste Lands.  
 Orig Pub : Tr. In-ta pochvoved. AN KazSSR, 1957, 7,  
 3-6  
 Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. General. J  
 Abs Jour : RZhBiol., No 6, 1959, 34574  
 Author : Fat'yanov, A. S.  
 Inst : Gor'kov State Pedagogical Institute.  
 Title : Importance of the Economic Activity of Man in  
 the Development of the Northern Forest-and-  
 Steppe Soil Cover.  
 Orig Pub : Uch. zap. Gor'kovsk. gos. ped. in-t, 1958,  
 20, 34-58  
 Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. General. J  
 Abs Jour : RZhBiol., No 6, 1959, 24577  
 Author : Semchenkov, G. Ya.  
 Inst : Belotserkov' Agricultural Institute.  
 Title : Properties and Fertility of the River Ros' Water-Meadow Soils.  
 Orig. Pub : Nauchn. zap. Belotserkovsk. s.-kh. in-t, 1958, 5, 211-219  
 Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24581  
 Author : Labenets, Ye. M.  
 Inst : Soil Science Institute AS USSR.  
 Title : Mineralogical Composition of Fractions Larger than 0.001 mm in Soils of the Central Part of Kizyl-Arvat Foot-of-the-Mountain Plain.  
 Orig Pub : Tr. Pochv. in-ta AN SSSR, 1958, 53, 39-50  
 Abstract : A mineralogical composition of fractions larger than 0.001 mm of takyrs soil, of alluvial periodically-inundated soil, primitive sierozem and of laomy soils from temporary river beds is submitted. Investigations were conducted with the assistance of a polarizing microscope and

Card : 1/5

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24581

Author :  
Inst :  
Title :

Orig Pub :

Abstract : immersed liquids. The basic components of the mineralogical composition of the fractions are quartz, feldspar (principally, albite and microcline) and mica; the accessory minerals are hornblende, epidote, chlorite, cyocite, pyroxene and in smaller quantities titanite, granite, circoe and rutile. Usually there are

Card : 2/5

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24581

Author :  
Inst :  
Title :

Orig Pub :

Abstract : present transparent ore minerals. With the decrease of the fractions' sizes, the mica content is increased and the contents of quartz and feldspar are decreased. For the takyr soil, feeble signs of biochemical weathering of minerals and a slight rolling capacity of the grains are noted. In alluvial

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Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24581

Author :  
Inst :  
Title :

Orig Pub :

Abstract : soils, considerable contents of mica and feldspar are noted, as well as cyosite. In primitive sierozem, the quantity of quartz increases. Appearance of sericitized and modified minerals are observed. The mineralogical composition of loamy soils is distinguished by an increase of the mica content. Data of

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Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24581

Author :  
Inst :  
Title :

Orig Pub :

Abstract : the total chemical analyses of the fractions, obtained from takyr soils, are submitted. An increase of Mg content in the finer fractions and their impoverishment of Ca is noted. --  
N. I. Bazilevich

Card : 5/5



Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, 24582  
 Author : Gorbunov, N. I.  
 Inst : Soil Institute AS USSR.  
 Title : Mineralogical Composition and Properties of Suspended Matter in the Amu-Dar'ya and Kura Rivers.  
 Orig Pub : Tr. Pochv. in-ta AN SSSR, 1958, 53, 51-53  
 Abstract : Suspended matter of the Kura River and its tributaries is richer in silt fractions (45.5-57.9 percent) than the suspended matter of the Amu-Dar'ya River. Study of the mineralogical composition of the suspended matter's silt fractions was conducted by thermal, rentgenographic methods and occasio-  
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Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils.  
 Abs Jour : RZhBiol., No 6, 1959, No 24582  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : nally with the aid of an electronic microscope. Beydellite and hydromica were identified in the suspensions; beydellite predominates in the suspensions of the Kura River, and hydromica in Amu-Dar'ya. The exchange capacity of a fraction less than 0.001 mm, from the Kura's suspended matter constituted more than  
 Card : 2/4

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24582  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : 46 milliequivalents, that of Amu-Dar'ya did not exceed 36 milliequivalents; the maximal hygroscopicity amounted to 20-23 percent and about 18 percent, respectively. The silt fraction of Kura's suspended matter was somewhat richer in  $R_2O_3$  and poorer in  $SiO_2$  than Amu-Dar'ya's suspensions. The ratio of  $SiO_2 : R_2O_3$  was larger than 3 and smaller than 3, respectively.  
 Card : 3/4

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24582  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : vely. The differences of the mineralogical composition and physico-chemical and physical properties condition the different effect of irrigating waters on the properties of the soils. -- N. I. Basilevich  
 Card : 4/4

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24583  
 Author : Yarilova, Ye. A.  
 Inst : Soil Institute AS USSR.  
 Title : Mineralogical Characteristics of Solonetz Soils in the Chernozem Zone.  
 Orig Pub : Tr. Pochv. in-ta AN SSSR, 1958, 53, 131-142  
 Abstract : By the micromorphological method with the aid of microscopic sections under a microscope and by the method of mineralogical analysis in immersion liquids, two solonetz soils in the chernozem zone, representing successive stages of the solonetz developmental process in chernozem soil, were studied. The development of the solonetz process over the  
 Card : 1/4

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24583  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : chernozem soil brought about important changes of the mineralogical composition in 50 years. Gypsum and tenardite appeared; the soil became enriched with Ca in the microcrystalline form due to the migration of the solutions to the surface horizons. The formation of iron-manganese-humus concretions  
 Card : 2/4

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils.

Abs Jour : RZhBiol., No 6, 1959, No 24583

Author :  
Inst :  
Title :

Orig Pub :

Abstract : takes place with greater intensity, thanks to the periodic advent of anaerobic conditions; a dispersion of the minerals is observed, particularly of crystalline quartz; there appeared the absent-in-the-chnozem mobile colloid-morphic argillaceous mineral. According to its properties and chemical composition, the latter is closely related to ferrous beydellite. The

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Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24583

Author :  
Inst :  
Title :

Orig Pub :

Abstract : migration of this mineral from the upper horizons to the alluvial ones are noted. The migration is accomplished, it seems, in complex with fulvic acids and mobile humous acids. Specific secondary argillaceous minerals, inherent to the solonetz-soil formation only, were not found. -- N. I. Bazilevich

Card : 4/4

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24586

Author : Nikol'skiy, N. N.  
 Inst : Moscow Agricultural Academy imeni K. A. Timiryazev.

Title : The Effect of Hydroxide Solutions of Mono- and Bivalent Minerals on the Water Resistance of the Chernozem's Soil Aggregates.

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva, 1957, vyp. 31, 228-234

Abstract : The effect of the hydroxide solutions of Na, K, Ca, Mg and Ba on the structure stability of the chernozem virgin lands in Kamen Steppe was compared. The soils were from under the forest and from old arable lands. The effect of alkaline and acid solutions from a pH higher

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Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24586

Author :  
 Inst :  
 Title :

Orig Pub :

Abstract : than 12 to a pH of 2 during 24 hours did not display a more destructive action on the water-resistant soil aggregates than the action of distilled water; experiments with KOH and NaOH were the exception. Solutions of Ba and K hydroxydes produced a higher content of water-resistant aggregates than did experiments with water. The Mg hydroxyde solution did not differ

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Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24586  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : from water in its effect, and NaOH and KOH solutions decreased the content of water-resistant aggregates in the soil. The resistance of the aggregates in the soil is decreased with the increase of the concentration of NaOH solutions. -- M. L. Yaroshenko  
 Card : 3/3

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24590  
 Author : Danilin, A. I.  
 Inst : Scientific Research Institute of Hydrometeorological Apparatus Construction.  
 Title : The Ohmic Method of Measuring Soil Humidity with the Application of Carbon Electrodes in Glass Fibers.  
 Orig Pub : Tr. N.-i, in-ta gidrometeprol. priborostr., 1957, vyp. 5, 52-78  
 Abstract : Simple and cheap producers of soil humidity (carbon and gypsum) were developed, which make it possible to measure soil humidity ranging from field-water capacity to the atmospheric dry state. Intermediate media - glass fibers,  
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Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J  
Abs Jour : RZhBiol., No 6, 1959, No 24590  
Author :  
Inst :  
Title :  
Orig Pub :  
Abstract : gypsum or river sand - are used to improve refinement of the work. Satisfactorily accurate data are obtained with the application of a megohm meter of the M-1101 type. Bibliography of 12 titles. -- I. G. Tayurupa

Card : 2/2

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils.  
Abs Jour : RZhBiol., No 6, 1959, No 24591  
Author : Vladychenskiy, S. A.  
Inst : -  
Title : A Few Remarks about the Problem of Water-Regime Types.  
Orig Pub : Pochvovedeniye, 1958, No. 6, 118-119  
Abstract : Refinement and classification of the water-regime types, developed by A. A. Rode, is proposed. Particularly, it is proposed to differentiate the stagnant type of the water regime for bog and boggy soils, the water-meadow type of the water regime and the water-regime type of sands and sand soils. -- S. A. Vladychenskiy

Card : 1/1

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24593  
 Author : Konstantinov, A. R.; Malchanov, A. L.  
 Inst : Kazakhstan Scientific Research Hydrometeorological Institute.  
 Title : Evaluation of Evaporation Changes and Water Balance of the Soils in the Steppe and Forest-and-Steppe Zones of the USSR European Territory under the Influence of Agricultural and Forest Amelioration Measures.  
 Orig Pub : Tr. Kazakhsk. n.-i. gidrometeorol. in-ta, 1957, vyp. 8, 64-93  
 Abstract : In the past, during unscientific agriculture, about 86 percent (353 mm) was consumed by evaporation from the total amount of precipitation for these territories, 11 percent (46 mm) was used  
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Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24593  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : used up for surface drainage and 3 percent (14 mm) flowed underground. Approximate computations of the water balance for the next decades were presented. -- S. A. Nikitin  
 Card : 2/2



Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24595  
 Author : Bazilevskaya, Ye. S.  
 Inst : -  
 Title : Characteristics of the Filtration Properties of Soils and Suspended Matter in the Amu-Dar'ya River.  
 Orig Pub : Pochvovedeniye, 1958, No. 4, 102-107  
 Abstract : With the help of Russell's apparatus (improved by Gotikov), the water permeability of soils in the agriculture-irrigated alluvia and suspended material, collected in Chimbay Oasis (delta of Amu-Dar'ya), was determined. The investigation was conducted on fractions of 0.1-0.01 mm, 0.005-0.01, 0.001-0.005 and  
 Card : 1/3

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24595  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : smaller than 0.001 mm, obtained from soils and suspensions, in their mixtures and specimens on the whole. Filtration speed was determined through layers of 5-10 mm. The filtration speed decreased with the increase of soil dispersion: a fraction of 0.001-0.005 mm has a filtration capacity of 15 ml in 1 hour, and a fraction of less than 0.001 mm has a filtration capacity  
 Card : 2/3

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24595

Author :  
Inst :  
Title :

Orig Pub :

Abstract : of 1.2 ml at the layer's thickness of 5 mm. With the increase of the number of layers, their thickness and percolation time of water through the soil, a decrease of the filtration speed is observed. Bibliography of 18 titles. -- N. G. Minashina

Card : 3/3

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24598

Author : Chernov, V. A.  
Inst : Academy of Sciences USSR.  
Title : Concerning the Dependence between the Total Exchangeable Cations and the Content of Particles of Less than a Micron in Podzol Soils.  
Orig Pub : Dokl. AN SSSR, 1958, 119, No 5, 1017-1019

Abstract : Using the soils of Kaliningradskaya Oblast as an example, it was demonstrated that a close dependence between the sum of absorbed bases and the content in soil specimens of particles, less than 1  $\mu$ , may serve as a method for diagnosis of soil-formation rocks.

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Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24599

Author : Dzhavadyan, T.  
 Inst : -  
 Title : Securing the Soils of Karabakh Steppe with Nutrient Elements.  
 Orig Pub : Sotz. s. kh. Azerbaydzhana, 1957, No. 6, 28-30

Abstract : Meadow soils, located in Karabakh Steppe (Azerbaydzhana), contain 213.4-246.7 t/ha of organic substances and up to 15.3 of total N, 7.9 t of total P and 5.5 t of exchangeable K. The gray-brown soils contain, respectively, 75.8-84.4, 6.8-12.4, 7.1; of total K 44-53.3 t/ha. In comparison with meadow soils, they contain five times more of easily hydro-

Card : 1/3

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24599

Author :  
 Inst :  
 Title :

Orig Pub :

Abstract : lyzable N. The sierozems are poor in total N (5.6 t/ha), but contain sufficient reserves of easily-hydrolyzable N. Reserves of assimilated phosphoric acid are not large (0.077 t/ha). According to reserves of total K, they exceed all other soils, but in comparison with exchangeable K, they occupy last place. These

Card : 2/3

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, 24599

Author :  
Inst :  
Title :

Orig Pub :

Abstract : soils require organic substances for their enrichment. -- E. A. Nikitin

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Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24601

Author : Koren'kov, D. A.  
Inst : -  
Title : Determination of Ammonia and Nitrates in Soil (Method of Microdiffusion in the Modification of Bremner and Shaw).

Orig Pub : Udobreniye i urozhay, 1958, No. 8, 57-58

Abstract : No abstract.

Card : 1/1

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24602

Author : Aderikhin, P. G.

Inst : -

Title : Absorption of Phosphate Ions by Soils and Plants.

Orig Pub : Pochvovedeniye, 1957, No. 5, 84-89

Abstract : Under field experiments of 1950-1955, on clayey alkaline chernozem of the Voronezh University Botanical Garden, 90 kg of  $P_2O_5$  (in the form of  $P_s$ ), 60 kg of N (in the form of  $(NH_4)_2SO_4$ ) and 60 kg of  $K_2O$  (in the form of KCl) were introduced in the ground to a depth of 5-8 cm. The count of the phosphates was conducted according to the plan of F. V.

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Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24602

Author :

Inst :

Title :

Orig Pub :

Abstract : Chirikov. The introduced  $P_s$  was rapidly absorbed by the soil, principally in its arable horizon with transition into compounds soluble in acetic acid and then into compounds soluble in 0.5 n. HCl. After preliminary (annually, up to 6 years) treatment by the phosphates, the  $P_2O_5$  absorption by the soil perceptibly diminished. The introduction of N and K did not

Card : 2/3

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24602  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : affect the  $P_2O_5$  content in the soil. The maximum absorption of P by spring wheat and corn was observed at the beginning of development; the minimum, at the end. -- B. Ye. Kravtsova

Card : 3/3

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24605  
 Author : Kardinalovs'ka, R. I.  
 Inst : -  
 Title : Determination of Absorbed Potassium in Soils with the Aid of Sodium Tetraphenylborate.  
 Orig Pub : Byul. nauchn. inform. po zemlerobstvu, 1958, No. 3, 64-66  
 Abstract : Results are submitted for the content determination of absorbed potassium in the soils with the aid of sodium tetraphenylborate, hydrochloric acid and the cobalt nitrite method (Milne Modification). A wide application at the massive analyses of the soils is recommended - the method of determination with the aid of

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Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24605  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : sodium tetraphenylborate. This method may be used to obtain rapidly data of adequate accuracy ( $\pm 2$  percent). -- P. V. Shramko

Card : 2/2

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24606  
 Author : Zyrin, N. G.; Orlov, D. S.  
 Inst : Moscow University.  
 Title : Determination Methods of the Activity of Sodium Ions in Soils and Soil Solutions.  
 Orig Pub : Vest. Mosk. un-ta, Ser. biol. pochvoved., geol., geogr., 1958, No. 1, 71-80  
 Abstract : The activity of sodium ions in soils and soil solutions may be determined by a special glass electrode with Na-function with the aid of a lamp potentiometer. The magnitude of activity is closely connected with the genetic peculiarities of certain soils and may serve as a method for an approximate diagnosis of solonchets and saline soils. For these purposes, it

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Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24606

Author :  
Inst :  
Title :

Orig Pub :

Abstract : is recommended to utilize the pNa index (the negative logarithm of the Na-ions' activity). This same method is also useful in determining the concentration of sodium ions in saline extracts from the soils under conditions of the application of 0.4 m CaCl<sub>2</sub>. -- D. S. Orlov

Card : 2/2

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24607

Author : Kopteva, Z. F.  
Inst : Timiryazev Agricultural Academy.  
Title : Concerning the Study of Sesquioxides' Seasonal Dynamics in Peaty-Podzol Soils.  
Orig Pub : Izv. Timiryazovsk. s.-kh. akad., 1958, No1 1, 217-220

Abstract : A method for determining mobile forms of sesquioxides is briefly described. This method permits one to analyze Fe Ferrous or ferric), Al and Mn. The method may be utilized under field conditions when working with wet soil specimens. -- A. M. Smirnov

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Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24608

Author : Tsyurupa, I. G.  
Inst : Soil Institute AS USSR.  
Title : Effect of the Crystallization Degree of Iron Compounds on Their Solubility.

Orig Pub : Tr. Pochv. in-ta AN SSSR, 1958, 53, 113-130

Abstract : The quantity of abstracted Fe, diluted by acids, gives an idea of the crystallization degree of its compounds in soils. Natural compounds of Fe, depending upon their solubility in mineral acids, are subdivided into several groups: (1) stable minerals of the Fe oxide and hydroxide groups (incapable of serving as

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Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24608

Author :  
Inst :  
Title :

Orig Pub :

Abstract : a source of free Fe accumulation in soils);  
(2) comparatively stable secondary formations (limonite, bauxite) - the clayey minerals, ferri-halloysite, nontronite - belong to this group;  
(3) soluble clayey minerals (for instance, biotite) and secondary soil formations (the latter are capable of serving as a source of free Fe accumulation in the soil). It is indicated that

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Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24608  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : at a prolonged action of acid solutions (particularly, under reducing conditions), Fe is extracted even from the most stable minerals. The action of Tamm's reaction on various Fe compounds is determined, on the whole, not by the crystallization degree, but by the composition of these compounds. Thus, Tamm's reagent extracts comparatively a great deal of Fe  
 Card : 3/4

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24608  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : from the alluvial horizons of podzol soils, but has almost no action on the amorphous Fe hydroxide.  $H_2S$  acts less energetically on Fe compounds than 1 n.  $H_2SO_4$ . -- N. I. Bazilevich  
 Card : 4/4

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24611

Author : Batalin, A. Kh.; Bogdanova, Ye. S.; Popova, A. A.; Sadvorskaya, L. V.; Filimonova, Z. G.; Khmelevskaya, N. A.; Shtark, P. A.

Inst : All-Union Chemical Society imeni D. I. Mendeleev

Title : The Contents of Boron, Cobalt, Copper, Molybdenum, Nickel, Manganese and Fluorine in Certain Soils of the Sorochinskiy Rayon in Chkalovskaya Oblast.

Orig Pub : Vest. Chkalovskogo obl. otd. Vses. khim. o-va im. D. I. Mendeleeva, 1957, vyp. 7, 7-9

Abstract : Determination of the microelements was conducted in the arable and subarable horizons of chernozem soils under different cultivations.

Card : 1/3

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils.

Abs Jour : RZhBiol., No 6, 1959, No 24611

Author :  
 Inst :  
 Title :

Orig Pub :

Abstract : Analyses were conducted according to the methods of the Institute of Geochemistry and Analytical Chemistry AS USSR. The contents of the microelements fluctuate percentagewise: B, 0.000053-0.0017; Co, 0.000045-0.00045; Cu, 0.0002-0.011; Mo, 0.00011-0.036; Ni, 0.0000018-0.00064; Mn, 0.0027-0.067; F, 0.0013-0.061. The quantity of the microelements in the in-

Card : 2/3

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24611

Author :  
Inst :  
Title :

Orig Pub :

Abstract : stigated soils corresponds to their average content in the chernozem soils of the USSR.  
— M. N. Kudryavtsev

Card : 3/3

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24612

Author : Gol'tman, A. D.; Gurevich, V. G.  
Inst : Khar'kov Pharmaceutical Institute.  
Title : Determination of Water-Soluble Compounds of Boron in Soils.

Abstract : Technique of B extraction from the soil: 5 g of atmosphere-dry soil is placed into a glass flask of 25 ml, adding 10 ml of distilled water. The flask is immersed in water, heated to 55° for 30 minutes, mixing its contents every 5 minutes. In 20 minutes after the end of heating, the liquid is filtered through a glass with porous or saltless filter. In the aliquot portion, the B content is determined by the curcumin method by means of a filter

Card : 1/2

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24612  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : photometer. Experimental results on the study of the interfering effect of substances, extracted together with B by the water from the soil, are presented. A correction coefficient for the calculation of these substances is submitted.  
 Card : 2/2

Country : USSR  
 Category : Soil Science. Physical and Chemical Properties of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24613  
 Author : Malyaga, D. P.  
 Inst : -  
 Title : An Experiment in Biologic-Geochemical Prospecting for Molybdenum in Armenia.  
 Orig Pub : Geokhimiya, 1958, No. 3, 248-266  
 Abstract : The distribution of Mo in soils and plants of the Kadzharan mountain region in Armenia was studied. Copper-molybdenum deposits may be made visible by the dispersion sureols of the ore elements. In the deposit regions, the Mo content in oils, water and plants exceeds by hundreds of times its usual content in the bio-  
 Card : 1/3

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24613

Author :  
Inst :  
Title :

Orig Pub :

Abstract : sphere. A definite correlation between the Mo and Cu contents in rocks (ores) and their contents in soils and plants is established. The submitted charts of Mo isoconcentration in soils and plants permits to map the dispersion aureole in the district of the Okhcha River's left bank. Mining prospecting operations in the region's abnormality uncovered two large ore zones, rich

Card : 2/3

Country : USSR  
Category : Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24613

Author :  
Inst :  
Title :

Orig Pub :

Abstract : in Cu and Mo. The task was fulfilled in the Institute of Geochemistry and Analytical Chemistry AS USSR. Bibliography of 25 titles.  
— Yu. I. Dobritskaya

Card : 3/3

Country : USSR  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24614  
 Author : Suslova, Ye. V.  
 Inst : Northern Osetin Agricultural Institute.  
 Title : Organic Substances of Chestnut Soils in the  
 Eastern Pre-Caucasus.  
 Orig Pub : Tr. Severo-Osetinsk. s.-kh. in-ta, 1956, 17,  
 55-64  
 Abstract : Certain physico-chemical properties of the  
 Eastern Pre-Caucasian soils are briefly exa-  
 mined. The nature of free and mobile humic  
 acids in the chestnut soils and Pre-Caucasian  
 chernozems is similar. The free and mobile hu-  
 mic acids in light-chestnut soils are less re-  
 sistant to the coagulating action of  $\text{CaCl}_2$ ,  
 and their optical denseness is higher than the  
 chestnut soils', thus bearing witness to the  
 Card : 1/2

Country : USSR  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24614  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : great complexity of the molecules in the free  
 and mobile acids of the described light-chest-  
 nut soils. -- S. A. Nikitin

Card : 2/2

Country : USSR  
Category : Soil Science. Biology of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24617

Author : Galstyan, A. Sh.  
Inst : Academy of Sciences ArmSSR.  
Title : Study of the Comparative Activity of Catalase in Some Types of Armenian Soils. Communication I.  
Orig Pub : Dokl. AN ArmSSR, 1956, 23, No. 2, 61-65

Abstract : Carbonate, chestnut and brown soils possess the greatest catalase capacity to decompose  $H_2O_2$ . Lixiviated chernozem is characterized by the least catalase activity. This soil, at the reciprocal action with  $H_2O_2$ , in the first minute produces only 4.1 cm<sup>3</sup> of  $O_2$ , but the carbonated chestnut soil produces 15.4 cm<sup>3</sup>. The high catalase activity in the latter

Card : 1/3

Country : USSR  
Category : Soil Science. Biology of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24617

Author :  
Inst :  
Title :

Orig Pub :

Abstract : soils, apparently, finds itself in conformity with more intensive microbiological activity. The catalase activity in all soils appears weaker at the beginning of spring, increases in summer and then once again diminishes. The catalase activity along the soil profiles from top to bottom decreases. After sterilization of the soils, liberation of oxygen from them is lowered. Decomposition of  $H_2O_2$  possesses not only:

Card : 2/3



Country : USSR  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No. 24617  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : a biological character, but inorganic catalyzers also participate in this process. -- S. A. Nikitin

Card : 3/3

Country : USSR  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24620  
 Author : Burangulova, M. N.; Solov'yeva, Ye. P.; Starikova, Ye. I.  
 Inst : -  
 Title : Biological Properties of Certain Soils Beyond the Ural Mountains.  
 Orig Pub : V sb.: Vopr. proizvodit. ispol'zovaniya prirod. resursov Bashkirsk. Zaural'ya, Ufa, 1957, 15-21  
 Abstract : Soils of the regions beyond the Ural mountains, especially non-arable soils, are distinguished by a considerable reserve of humus and total P. Biological activity of the soils perceptably is reduced from the south to the north. Aerobic processes prevail in all the investigated soils

Card : 1/2

Country : USSR  
Category : Soil Science. Biology of Soils.

Abs Jour : RZhBiol., No 6, 1959, No 24620

Author :  
Inst :  
Title :

Orig Pub :

Abstract : (except the virgin lands). Nitrogen-fixation bacteria multiply more favorably under leguminous perennial grasses. Their greatest number is noted on lixiviated, podzol and rich chernozem. Cellulose-destroying bacteria and ammonia producing organisms are widely represented in lixiviated and podzol chernozems. In all soils, the amount of nitrogen-producing organisms is insignificant. -- G. N. Nesterova

Card : 2/2

Country : USSR  
Category : Soil Science. Biology of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24624

Author : Samoylov, I. I.  
Inst : Academy of Sciences USSR.  
Title : Microbiology and Problems of Soil Treatment.  
(Conference of Microbiologists in Leningrad, 5-10 February 1958.)

Orig Pub : Vestn. AN SSSR, 1958, No. 6, 114-115

Abstract : No abstract.

Card : 1/1

Country : POLAND  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, 24625  
 Author : Golebiowska, J.  
 Inst : -  
 Title : Application of Lockhead's Method for the  
 Investigation of the Distributed-in-Soil  
 Microorganisms, Causing Transformation of  
 Phosphorus.  
 Orig Pub : Acta microbiol. polon., 1957, 6, No. 1, 17-27  
 Abstract : With the aid of Lockhead's method (Soil Sci.,  
 1943, 55, 185; Canad. J. Res., 1938, 166,  
 152) the distribution in soils (sand, sandy  
 loam, loess) and in the rhizosphere (oat,  
 lupine, potato) of microorganisms, causing  
 the transformation of various P compounds,  
 was studied. The effect of the soil types and  
 Card : 1/2

Country : POLAND  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24625  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : developmental stages of plants on the num-  
 bers of the investigated microorganisms was  
 demonstrated. -- M. I. Nakhimovskaya

Card : 2/2

Country : BULGARIA  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24627  
 Author : Dinchev, D.  
 Inst : Ministry of Agriculture and Forestry.  
 Title : Reaction between Superphosphates and Soil Bacteria.  
 Orig Pub : Nauchni tr. M-vo zemed. i gorite. Ser. rasteniyev'datvo, 1957, 2, No. 4, 21-34  
 Abstract : The effect of powderlike and granulated (mineral and with organic substances) superphosphates on the soil microflora and the migration of the dissolved phosphoric acid from the granules has been investigated in typical chernozem, "tar-chernozem," gray forest soil and lixiviated brown forest soil. A considerable increase in the amount of microorganisms is observed in all soils around the granules:  
 Card : 1/6

Country : BULGARIA  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, 24627  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : at the same time, the amount of microorganisms is greater around the mineral granules than around the organic-mineral ones. For example, in the gray forest soil, the amount of microorganisms around the granules in a layer of 0-3 cm is greater by four times in the first instance and by 2.5 times in the second instance than in soil without the granules. In other soils (typical and lixiviated), a small  
 Card : 2/6

Country : BULGARIA  
Category : Soil Science. Biology of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24627

Author :  
Inst :  
Title :

Orig Pub :

Abstract : increase takes place. Mineral granules produce a stronger but shorter stimulating effect than organic-mineral granules; the powderlike superphosphate stimulates microflora development in a lesser degree than the granulated superphosphate. Phosphoric acid passes from the granules into the soil in a greater amount from the mineral granules than from the organic-mineral ones. Thus, in gray forest

Card : 3/6

Country : BULGARIA  
Category : Soil Science. Biology of Soils. J

Abs Jour : RZhBiol., No 6, 1959, No 24627

Author :  
Inst :  
Title :

Orig Pub :

Abstract : soil after 20 days around the mineral granule in a layer of 0.3 cm, there is 12.5 times more dissolved phosphoric acid and 7.6 times more around the organic-mineral granules than in soil under control. Farther movement of the phosphoric acid into the soil depends on the physical properties of the soil. The granulated superphosphate changes the qualitative composition of bacteria in the soil.

Card : 4/6

Country : BULGARIA  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24627  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : Fluorescent bacteria are found in the immediate vicinity of the granules; they constitute 86-90 percent of the total number of bacteria, growing of "MPA" medium. The observable increase in the harvest of the oats' green mass, at the treatment with superphosphates, the author explains, is due not only to the improvement of supplying the plants with phosphoric compounds, but also to the  
 Card : 5/6

Country : BULGARIA  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24627  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : development of fluorescent bacteria, which are useful for plants. -- V. V. Mikhaleva

Card : 6/6

Country : USSR  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24628  
 Author : Muromtsev, G. S.  
 Inst : -  
 Title : Concerning the Products of the Soil-Microorganisms' Activity in the Mobilization of  $P_2O_5$  Phosphorites.  
 Orig Pub : Agrobiologiya, 1957, No. 11, 96-103  
 Abstract : The solution of Ca phosphates by soil bacteria in connection with a change of the pH medium and the reproduction intensity of the microbe culture was investigated by the author in a semisynthetic glucose-aspartic medium with 0.02 corn extract and with fluapatite as a source of P. A direct dependence between the change of the pH medium and the  
 Card : 1/4

Country : USSR  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24628  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : intensity of the fluoapatite solution was not noticed: bacteria, related to *Bacterium herbicola* (2a and 2b), liberated 2.79-1.70 gamma/ml of  $P_2O_5$ , the pH medium attaining 4.15-3.95 at 6.3 under control; *Mycobacterium cyaneum* (19 a) attained 2.095 gamma/ml at the pH of 6.6; the culture of 3a attained 0.825 gamma/ml at the pH of 8.05, and the culture, related to *Ps radiobacter*, 0.195 gamma/ml at the pH of 6.65.  
 Card : 2/4

Country : USSR  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24628  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : The author, on the basis of literary data, explains the P mobilization from the phosphates by the formation of dissociated-with-difficulty organometallic complexes at the reciprocal action of the microorganisms' activity and the phosphates. Confirming this, a direct connection between the magnitude of the biomass accumulation and the quantity of the mobilized P (especially, the cultures of 2a and 19a) is  
 Card : 3/4

Country : USSR  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24628  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : noted. At the same time, the dissolved P almost completely attached itself to the bodies of the bacteria. On this basis, the author deduces that the biological mobilization of phosphorus is not always accompanied by a simultaneous increase in the quantity of free phosphorus in the medium. -- V. V. Mikhaleva  
 Card : 4/4



Country : USSR  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24629  
 Author : Krasil'nikov, N. A.; Kotelev, V. V.; Sabel'-  
 nikova, V. I.; Sergeyeva, N. V.  
 Inst \* Moldavian Branch of AS USSR.  
 Title : The Effect of Soil Bacteria on the Assimila-  
 tion by Plants of Phosphorus from Tricalcium  
 Phosphate.  
 Orig Pub : Izv. Mold. fil. AN SSSR, 1957, No. 9, (42),  
 127-133  
 Abstract : Barley, in sand cultivation with  $\text{Ca}_3(\text{PO}_4)_2$   
 marked with  $\text{P}^{32}$  as a source of phosphorus, was  
 grown under sterile conditions with the addi-  
 tion of bacteria cultures, which were isolated  
 from the Moldavian soil and which decompose  
 tricalcium phosphate. Bacterization increa-  
 sed P assimilation by the plants and their con-  
 Card : 1/2

Country : USSR  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24629  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : tent of water-soluble, protein and lipoidal  
 P. Bacterization affected the qualitative com-  
 position and quantity of amino acids (they  
 were analyzed chromatographically in an alco-  
 holic extraction of the plants) and also in-  
 creased the assimilation of P by barley in  
 the soil culture. -- T. M. Bushuyeva  
 Card : 2/2

Country : CZECHOSLOVAKIA  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24630  
 Author : Ridky, K.  
 Inst : Czechoslovakian Academy of Agriculture.  
 Title : The Role Played by Microbes in Plant Nutrition.  
 Orig Pub : Sbor. Ceskosl. akad. zemed. vet. Rostl. vyroba, 1956, 29, No. 9-10, 813-840  
 Abstract : Data on the quantity dynamics of different groups of microorganisms under the conditions of grassfield crop rotations in connection with their harvest are presented. It was demonstrated, in particular, that the number of microbes mineralizers of the oil or organic substances under grass mixtures find themselves in reverse relation to the plant harvests on these fields; this is noted es-

Card : 1/2

Country : CZECHOSLOVAKIA  
 Category : Soil Science. Biology of Soils. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24630  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : pecially in the period preceding the gathering of the harvest. -- From the author's summary

Card : 2/2

Country : USSR  
Category : Soil Science. Biology of Soils. J  
Abs Jour : RZhBiol., No 6, 1959, No 24631  
Author : Krasil'nikov, N. A.  
Inst : -  
Title : Concerning the Importance of Soil Microorganisms in Plant Nutrition (According to Materials of Soviet Microbiologists for the Past 40 Years).  
Orig Pub : Mikrobiologiya, 1957, 26, No. 6, 659-672  
Abstract : Review. Bibliography of 46 titles.

Card : 1/1

Country : USSR  
Category : Soil Science. Biology of Soils. J  
Abs Jour : RZhBiol., No 6, 1959, No 24632  
Author : Rubenchik, L. I.  
Inst : -  
Title : Relations between Microorganisms and the Higher Plants.  
Orig Pub : Mikrobiol. zh., 1957, 19, No. 3, 14-21  
Abstract : No abstract.

Card : 1/1

Country : USSR  
Category : Soil Science, Biology of Soils. J  
Abs Jour : RZhBiol., No 6, 1959, No 24633  
Author : Kalnin'sh, A. D.  
Inst : Institute of Microbiology AS LatvSSR.  
Title : State of Investigations in the Region of  
Soil Microbiology in the Latvian SSR.  
Orig Pub : Tr. In-ta mikrobiol. AN LatvSSR, 1958, vyp.  
7, 5-10  
Abstract : No abstract.

Card : 1/1

Country : USSR  
Category : Soil Science. Fertilizers. General. J  
Abs Jour : RZhBiol., No 6, 1959, No 24634  
Author : Ogg, U. G.  
Inst : -  
Title : The Application of Fertilizers in England.  
Orig Pub : Vestn. s.-kh. nauki, 1958, No. 2, 127-130  
Abstract : For the period of the years 1913-1916, the consumption of mineral fertilizers in Great Britain was greatly increased: N, 10 times; P<sub>2</sub>O<sub>5</sub>, twice, and K<sub>2</sub>O, 13 times. In 1956, 4 million tons of fertilizers were applied to the soil. More than 20 kg of N and K<sub>2</sub>O and 36 kg of P<sub>2</sub>O<sub>5</sub> are introduced per one ha of the land's cultivated area. The greatest quantity of the mineral fertilizers is applied

Card : 1/4

Country : USSR  
Category : Soil Science. Fertilizers. General. J  
Abs Jour : RZhBiol., No 6, 1959, No 24634  
Author :  
Inst :  
Title :  
Orig Pub :

Abstract : under potatoes and sugar beets. Perennial grasses (meadow and pasture) are fertilized inadequately, and in the majority of the regions of the land are not fertilized at all. At the present time, about 50 percent of phosphoric fertilizers are applied in the form of the trivalent  $P_s$ ; 25 percent, in the form of Thomas slag; 10 percent, in the form of phosphoric meal. Among the nitrogen fertilizers

Card : 2/4

Country : USSR  
Category : Soil Science. Fertilizers. General. J  
Abs Jour : RZhBiol., No 6, 1959, No 24634  
Author :  
Inst :  
Title :

Abstract : the following are widely used:  $Na$ ,  $Naa$  +  $CaCO_3$  (calcium ammonium nitrate),  $N_s$ ,  $(NH_4)_2PO_4$  and nitrophosphate. 60 percent of fertilizers are manufactured in Great Britain in the form of compounds. 90 percent of the compound and 50 percent of all fertilizers are manufactured in the form of granules. The tendency to increase the manufacture of concentrated fertilizers is characteristic. The most effective method of introducing P and K under grain, vegetables and

Card : 3/4

Country : USSR  
Category : Soil Science. Fertilizers. General. J  
Abs Jour : RZhBiol., No 6, 1959, No 24634  
Author :  
Inst :  
Title :  
Orig Pub :  
Abstract : green peas is of local importance. For potatoes and sugar beets, this method of P and K application is of no significance. -- O. P. Medvedeva

Card : 4/4

Country : USSR  
Category : Soil Science. Fertilizers. General. J  
Abs Jour : RZhBiol., No 6, 1959, No 24636  
Author : Vil'dflush, R. T.  
Inst : Belorussian Agricultural Academy.  
Title : Investigations of Agricultural Chemistry and Application of Fertilizers in the Belorussian Agricultural Academy.  
Orig Pub : Tr. Belcrussk. s.-kh. akademii, 1957, 26, No. 2, 29-42  
Abstract : A review of the tasks of the chair of agriculture in BSKhA from 1919. Bibliography of 50 titles.

Card : 1/1

Country : USSR  
Category : Soil Science. Fertilizers. General. J  
Abs Jour : RZhBiol., No 6, 1959, No 24637  
Author : Turchin, F. V.  
Inst : -  
Title : Concerning the Perspective Requirements of  
USSR Agriculture in Mineral Fertilizers and  
in Their Expedient Assortment.  
Orig Pub : Udobreniye i urozhay, 1958, No. 8, 7-12  
Abstract : No abstract.

Card : 1/1

Country : USSR  
Category : Soil Science. Fertilizers. General. J  
Abs Jour : RZhBiol., No 6, 1959, No 24640  
Author : Berezova, Ye. F.  
Inst : -  
Title : The Mutual Bond between Plants and the Micro-  
flora of Their Root System.  
Orig Pub : Agrobiologiya, 1956, No. 6, 22-28  
Abstract : A positive role played by the denitrifica-  
tion organisms on the growth and develop-  
ment of plants is indicated. A correct com-  
bination of agricultural engineering with  
the conditions of plant nutrition is necessary.  
Otherwise the saprophytic forms of microorga-  
nisms (B. macerans) may acquire properties  
which would be pathogenic for plants. -- G. N.  
Nesterova

Card : 1/1

Country : USSR  
 Category : Soil Science. Fertilizers. General. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24641  
 Author : Lupinovich, I. S.; Golub, T. F.; Vavula,  
 F. P.  
 Inst : Academy of Sciences BSSR.  
 Title : Concerning the Effect of Fertilizers on the  
 Fertility of Peat-Boggy Soils.  
 Orig Pub : Vestsi AN BSSR. Ser. biyal. n., 1956, No. 3,  
 5-14  
 Abstract : The joint application of lime, manure and  
 kainite on the peat-boggy soils of the low-  
 land type of the Minsk Bog Experimental Sta-  
 tion (1950-1953) caused considerable increase  
 in the soil of the quantity of ammonia-fixa-  
 tion bacteria, nitrification organisms, acti-  
 nomyces and spore-forming microorganisms. Mi-  
 neralization processes of the organic residues  
 Card : 1/2

Country : USSR  
 Category : Soil Science. Fertilizers. General. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24641  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : were intensified in the soil. The potato har-  
 vest in fertilized regions reached 173 percent  
 in comparison with the harvest on plots under  
 control. -- B. Kh. Sukhareva  
 Card : 2/2



Country : USSR  
 Category : Soil Science. Fertilizers. General. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24642  
 Author : Magnitskiy, K. P.  
 Inst : -  
 Title : Evaluation of Plant Nutrition According to  
 Their External Appearance.  
 Orig Pub : Priroda, 1956, No. 7, 61-64  
 Abstract : Plant indicators may be utilized to expose  
 those regions and districts that suffer from  
 a deficiency or an excess of macro- and micro-  
 elements. As indicators of N deficiency may  
 serve white-head cabbage and cauliflower; of  
 P deficiency - turnip (*Brassica campestris*  
*rapifera*) and the turnip kind (*Brassica napus*  
*rapifera*); of K deficiency - potato, beet,  
 bean, alfalfa; of Mg deficiency - potato,  
 Card : 1/2

Country : USSR  
 Category : Soil Science. Fertilizers. General. J  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : apple, black raspberry; of B deficiency -  
 sunflower, sugar beet, apple; of Mn deficiency  
 - oat, beet, potato, cabbage; of Cu deficiency  
 - oat, wheat, barley, pear; of Zn deficiency -  
 bean, soya, corn, apple, pear, citrous fruits;  
 of Mo deficiency - cauliflower, lettuce, legu-  
 minous grasses, citrus fruits. -- I. K. Fortu-  
 natov  
 Card : 2/2

Country : USSR  
 Category : Soil Science. Fertilizers. General. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24643  
 Author : Shmelev, V.; Sitnyanskiy, V.  
 Inst : Voronezh State Pedagogical Institute.  
 Title : The Analysis of the Soils' Acidity and of the  
 Fertilizers' System in the Under-Patronage  
 Collective Farm "Stalin Put'" in Gremyachen-  
 skiy Rayon of Voronezhskaya Oblast.  
 Orig Pub : Sb. stud. rabot. Voronezhsk. gos. ped. in-t,  
 1957, vyp. 2, 33-36  
 Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. Fertilizers. Mineral Ferti- J  
 lizers.  
 Abs Jour : RZhBiol., No 6, 1959, No 24647  
 Author : Tulin, A. S.  
 Inst : Krymskaya Oblast State Agricultural Experi-  
 mental Station.  
 Title : Tumulus Ashes as a Fertilizer.  
 Orig Pub : Tr. Krymsk. obl. gos. s.-kh. opytn. st., 1956,  
 2, 17-25  
 Abstract : Tumulus ashes, huge deposits of which were  
 formed in antiquity in various parts of the  
 Crimean steppes from the remains of steppe  
 plants, grain straws and dung, contain 2.1-  
 3.5 percent of  $K_2O$  and 1.0-1.5 percent of  
 $P_2O_5$ . For the Crimean soils, reacting negati-  
 vely to K, it is only a phosphorus fertilizer

Card : 1/2

Country : USSR  
Category : Soil Science. Fertilizers. Mineral Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24647

Author :  
Inst :  
Title :

Orig Pub :

Abstract : and the dose should not exceed 1.5 t/ha.  
The total harvest increment of the most important crop-rotation cultivation - corn, winter wheat and winter barley - in one year consisted of 3.5 c of seed and 7.5 c of straw or 7.2 c of fodder units from one acre. --  
N. N. Sokolov

Card : 2/2

Country : USSR  
Category : Soil Science. Fertilizers. Mineral Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24648

Author : Zemite, A.  
Inst : -  
Title : Soil Requirements of the Livanskiy Rayon (LatvSSR) in Calcium Fertilizers.  
Orig Pub : Pochva i urozhay. Riga, 1956, 5, 61-66

Abstract : No abstract.

Card : 1/1

Country : HUNGARY  
Category : Soil Science. Fertilizers. Organic Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24652

Author : Fekete, B.; Hargitai, I.; Mayerne-Kiss, T.

Inst : -

Title : Some Data on the Appraisal of the Most Important Organic Fertilizers.

Orig Pub : Agrakem. ea talaj, 1957, 6, No. 4, 337-344

Abstract : Comparative laboratory and field investigations of the more important kinds of organic fertilizers showed that the best proved to be: granulated biocompost (an organic substance mixed with excrements enriched with NPK) among the commercial fertilizers; indorcompost among the composts; and among the earth-manure mixtures, a mixture in relation of 1 : 4 from

Card : 1/2

Country : HUNGARY  
Category : Soil Science. Fertilizers. Organic Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24652

Author :

Inst :

Title :

Orig Pub :

Abstract : different kinds of manure - a manure, the storage of which was accomplished under concrete shields, according to the method of Kalbay. The properties of humus extraction from various fertilizers were studied by the intensity of absorbed light. On the basis of these investigations, the stability number of humus fertilizers and of composts, and the stability

Card : 2/3

Country : HUNGARY  
Category : Soil Science. Fertilizers. Organic Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24652

Author :  
Inst :  
Title :

Orig Pub :

Abstract : coefficient, the magnitude of which is proportional to the quantity of the humic stable components, were calculated. -- O. P. Medvedeva

Card : 3/3

Country : USSR  
Category : Soil Science. Fertilizers. Organic Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24654

Author : Musich, N. I.  
Inst : Yakutsk Branch AS USSR.  
Title : Concerning the Application of Organic Mineral Mixtures in Central Yakutia.

Orig Pub : Dokl. na 8-y nauchn. sessii (Yakutskiy fil. AN SSSR). Botan., pochvoved. zool., zootekhnika. Yakutsk, 1957 (1958), 67-75

Abstract : In small-plot experiments with winter rye in Yakutia, the effectiveness of 5 t/ha of humus, 5 t/ha of compost, a mixture of humus with manure liquor and 5c/ha of ashes and mixtures of organic fertilizers with ashes were compared. At the application of the fertilizers before sowing, ashes proved to be more effective than

Card : 1/4

Country : USSR  
Category : Soil Science. Fertilizers. Organic Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24654

Author :  
Inst :  
Title :

Orig Pub :

Abstract : organic fertilizers, but mixtures produced the best results. The greatest significance for the increase of crops was the growing winter-resistance of the plants at the introduction of ashes. At the introduction of fertilizers under additional forage in autumn, the effectiveness of all fertilizers was decreased considerably, and the application of

Card : 2/4

Country : USSR  
Category : Soil Science. Fertilizers. Organic Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24654

Author :  
Inst :  
Title :

Orig Pub :

Abstract : ashes gave a smaller increment than the application of organic fertilizers. The vernal additional forage was even less effective. In the experiment with corn on unfertilized ground, 89.8 c/ha of the greens were obtained; the haphazard application of 40 t/ha of manure increased the harvest to 197.7 c/ha, whereas the best variant of the organic-mineral mixture at the

Card : 3/4

Country : USSR  
Category : Soil Science. Fertilizers. Organic Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24654

Author :  
Inst :  
Title :

Orig Pub :

Abstract : introduction into holes produced only 128.8  
c/ha. -- Z. I. Zhurbitskiy

Card : 4/4

Country : USSR  
Category : Soil Science. Fertilizers. Organic Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24657

Author : Boyarovich, N. M.  
Inst : Alma-Ata Selection Station.  
Title : Fenugreek in the Fertilization of Vegetables.

Orig Pub : Udobreniye i urozhay, 1958, No. 5, 22-25

Abstract : According to experimental results in the Alma-Ata Selection Station, fenugreek *Trigonella* or fenugreek *Trigonella foenum graecum* L. in the fertilization of vegetables secured a high increment in the crops of potatoes and winter wheat. In the south, under conditions of irrigation agriculture and unsupported "bogaras"

Card : 1/2

Country : USSR  
Category : Soil Science. Fertilizers. Organic Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24657

Author :  
Inst :  
Title :

Orig Pub :

Abstract : [a designation for crops cultivation in Central Asia without artificial irrigation],  
ir deserves a wide industrial check-up. --  
N. N. Sokolov

Card : 2/2

Country : USSR  
Category : Soil Science. Fertilizers. Organic Fertilizers. J

Abs Jour : RZhBiol., No 6, 1959, No 24658

Author : Nikolayev, M. V.

Inst : -

Title : Installation and Exploitation of the Irrigation of Fields in the German Democratic Republic.

Orig Pub : Udobreniye i urozhay, 1958, No. 6, 57-61

Abstract : No abstract.

Card : 1/1



Country : USSR  
Category : Soil Science. Fertilizers. Organic Fertilizers. J  
Abs Jour : RZhBiol., No 6, 1959, No 24659  
Author : Tikhomirova, L. D.; Rozhkovskaya, A. A.  
Inst : Far Eastern Scientific-Research Institute of  
Agriculture.  
Title : Application of Peat as a Fertilizer.  
Orig Pub : Byul. nauchno-tekhn. inform. Dal'nevost. n.-1.  
in-ta s.-kh., 1958, No. 5, 28-31  
Abstract : No abstract.

Card : 1/1

Country : USSR  
Category : Soil Science. Fertilizers. Organic Fertilizers. J  
Abs Jour : RZhBiol., No 6, 1959, No 24660  
Author : Khristeva, L. A.  
Inst : Khar'kov University.  
Title : Carbonaceous Shale as One of the Possible  
Prospects of Raw Material for the Production  
of Humic Fertilizers.  
Orig Pub : Sb.: Guminovyye udobreniya. Khar'kov, Khar'-  
kovsk. un-t, 1957, 29-38  
Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. Fertilizers. Organic Fertilizers. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24662  
 Author : Ovechkin, T. V.; Bitnyy, L. A.  
 Inst : -  
 Title : Results of the Application of Organic Mineral Mixtures on the Collective Farm "Testament of V. I. Lenin."  
 Orig Pub : Agrobiologiya, 1958, No. 4, 91-93  
 Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. Fertilizers. Organic Fertilizers. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24663  
 Author : Zhenatov, A. P.; Rokhtanen, L. S.  
 Inst : -  
 Title : Concerning the Economic Effectiveness of the Utilization of Peat as a Fertilizer.  
 Orig Pub : Udobreniye i urozhay, 1958, No. 8, 44-46  
 Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. Cultivation. Improvement. Erosion. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24665  
 Author : Ivanov, P. K.; Balandina, Ye. I.  
 Inst : -  
 Title : Deep Plowing in the Southern Chernozems of the Regions beyond the Volga.  
 Orig Pub : S. kh. Zavolzh'ya, 1958, No. 8, 28-30  
 Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. Cultivation. Improvement. Erosion. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24666  
 Author : Pestova, M. N.; Kuppo, V. K.  
 Inst : Scientific-Research Institute of Vegetable Economy.  
 Title : A System of Soil Cultivation in Vegetable-Grassfield Crop Rotation.  
 Orig Pub : Byul. nauchno-tekhn. inform. N.-i. in-ta ovoshchn. kh-va, 1958, No. 4, 40-43  
 Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. Cultivation. Improvement. Erosion. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24667  
 Author : Sidorov, M. I.; Van'kovich, G. N.  
 Inst : -  
 Title : Study of the Results in Methods of Basic Soil Cultivation in Moldavia.  
 Orig Pub : Zemledeliye, 1958, No. 9, 64-70  
 Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. Cultivation. Improvement. Erosion. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24668  
 Author : Yarovenko, V. V.; Kammodov, V. V.; Suchalkina, M. I.  
 Title : Preparation of the Soil on Inclined Surfaces during Meadow Cultivation.  
 Orig Pub : Zemledeliye, 1958, No. 9, 59-63  
 Abstract : No abstract.

Card : 1/1

Country : USSR  
Category : Soil Science. Cultivation. Improvement.  
Erosion. J

Abs Jour : RZhBiol., No 6, 1959, No 24699

Author : Sobolev, S. S.

Inst : -

Title : Methods of Soil Cultivation in Regions of  
Water and Wind Erosion.

Orig Pub : Zemledeliye, 1958, No. 8, 3-8

Abstract : No abstract.

Card : 1/1

Country : USSR  
Category : Soil Science. Cultivation. Improvement.  
Erosion. J

Abs Jour : RZhBiol., No 6, 1959, No 24670

Author : Glukhov, V. M.

Inst : Moscow Agricultural Academy imeni K. A.  
Timiryazev.

Title : The Effectiveness of Various Methods of Autumn  
Soil Cultivation under the Conditions of Novo-  
Annenskiy Rayon in Stalingradskaya Oblast.

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva,  
1958, vyp. 32, 240-246

Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. Cultivation. Improvement. Erosion. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24672  
 Author : Orlovskiy, N. V.; Fesko, K. Ya.; Goppe, G. S.; Strugalova, Ye. V.  
 Inst : Tomsk University.  
 Title : Salination of Soils in the Aley Irrigation System and Measures of Prevention and Control Thereof.  
 Orig Pub : Tr. Tomskogo un-ta, 1957, 140, 82-91  
 Abstract : The Aley irrigation system is the largest in Altay Kray; its total area consists of 11,000 hectares. The Soil-Improvement Expedition of the Altay Agricultural Institute investigated on the irrigated territory of the Rubtsov Sugar-Beet Collective Farm causes of secondary salina-  
 Card : 1/3

Country : USSR  
 Category : Soil Science. Cultivation. Improvement. Erosion. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24672  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : tion and methods of its control. After 20 years of irrigation, almost the entire territory is in the grip of secondary salination processes of various intensity. The fundamental reason of soil salination are the very costly mineralized subsoil waters. It is recommended: (1) a strict differentiation of irrigation; (2) realization of planned irriga-  
 Card : 2/3

Country : USSR  
Category : Soil Science. Cultivation. Improvement.  
Erosion. J

Abs Jour : RZhBiol., No 6, 1959, No 24672

Author :  
Inst :  
Title :

Orig Pub :

Abstract : ted fields; (3) measures to reduce water filtration from the canals; (4) creation of a thick structural arable layer, and (5) strengthening the role played by perennial grasses in crop rotation, etc. -- G. B. Zakhar'ina

Card : 2/3

Country : USSR  
Category : Soil Science. Cultivation. Improvement.  
Erosion. J

Abs Jour : RZhBiol., No 6, 1959, No 24673

Author : Bobchenko, V. I.  
Inst : Academy of Sciences USSR.  
Title : Subsoil Mole Irrigation of the Argillaceous Chernozems in Kurskaya Oblast.  
Orig Pub : V sb.: Orosheniye s.-kh. kul'tur v Tsentr.-chernozem. polose RSFSR. Vyp. 2, M., AN SSSR, 1956, 155-184

Abstract : Observations of the effect of mole holes without irrigation on soil and plants showed the following: mole holes without apertures at the top (plugged up until the sowing season) increase in May-June the soil humidity, stimulate microbiological activity; in July they dry up the soil and improve the absorption of melted waters. Non-irrigated mole holes add

Card : 1/4





Country : USSR  
Category : Soil Science. Cultivation. Improvement.  
Erosion. J

Abs Jour : RZhBiol., No 6, 1959, No 24673

Author :  
Inst :  
Title :

Orig Pub :

Abstract : wheat growing and increases the harvest of agricultural products. The supported method of irrigation is recommended for cultivations with a surface root system. Subsoil mole irrigation permits a water-charged flow under the next cultivation, without waiting for the harvest of its predecessor to be collected. -- L. O. Karpachevskiy.

Card : 4/4

Country : USSR  
Category : Soil Science. Cultivation. Improvement.  
Erosion. J

Abs Jour : RZhBiol., No 6, 1959, No 24677

Author : Rabochev, I.  
Inst : -  
Title : Organization and Installation of Water Irrigation.

Orig Pub : Khlopkovodstvo, 1957, No 9, 37-39

Abstract : The organization and installation of fall-winter irrigation of the cotton-field soils under conditions of artificial drainage are described. the most favorable periods for irrigation are: on weakly and averagely salinated soils, light and averagely argillaceous soils, September - beginning of October; on soils of recent appropriation, August - September. There are also

Card : 1/2

Country : USSR  
Category : Soil Science. Cultivation. Improvement.  
Erosion. J

Abs Jour : RZhBiol., No 6, 1959, No 24677

Author :  
Inst :  
Title :

Orig Pub :

Abstract : submitted the norms and number of waterings  
for the light-in-mechanical-composition soils,  
at the deep level of ground waters, under the  
conditions of Chardzhous, Tashauz and Khorezm  
experimental stations.

Card : 2/2

Country : USSR  
Category : Soil Science. Cultivation. Improvement.  
Erosion. J

Abs Jour : RZhBiol., No 6, 1959, No 24678

Author : Kats, D.  
Inst : -  
Title : Utilization of Soil Waters for Irrigation in  
the Bukhar Oasis.

Orig Pub : Khlopkovodstvo, 1956, No. 8, 49-51

Abstract : No abstract.

Card : 1/1

Country : USSR  
 Category : Soil Science. Cultivation. Improvement. Erosion. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24681  
 Author : Gruzdev, D. M.  
 Inst : Kinel' Selection Station.  
 Title : Effect of Forest Belts on the Wind Erosion of Soils in the Regions beyond the Volga River.  
 Orig Pub : Pochvovedeniye, 1957, No. 9, 116-119  
 Abstract : There were conducted in the winters of 1948-1950 investigations of wind erosion of the soils in the territory of the Kinel' Selection Station, having at its disposal field-protecting forest belts and ravine-tree stands. The observations indicated that beginning with 50 meters from the forest belt, the organic portion of the eroded particles prevails over  
 Card : 1/2

Country : USSR  
 Category : Soil Science. Cultivation. Improvement. Erosion. J  
 Abs Jour : RZhBiol., No 6, 1959, No 24681  
 Author :  
 Inst :  
 Title :  
 Orig Pub :  
 Abstract : the mineral, and content of the free forms of  $P_2O_5$  in the soil increases to the extent of withdrawal from the forest stands. -- M. L. Yaroshenko

Card : 2/2

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